

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions,  
and listings, of claims in the application:

LISTING OF CLAIMS:

1. (withdrawn) A method for the manufacture of thermoformed bodies, according to which a sheet (15) of thermoformable plastic material is heated to a plasticizing temperature, subsequently causing it to adhere to a shaping surface of a mold (11), comprising the steps of:

- heating the sheet material (15) to a plasticizing temperature, maintaining it in a suspended condition, held along its peripheral edges;

- causing an enrichment of material by pre-shaping the heated sheet (15) of plastic material, at least partially conforming it to a shaping of the mold (11), by performing relative movements of at least part of the peripheral edges of the sheet (15);

- bringing the heated and pre-shaped sheet (15) into an aligned condition with the mold (11), and vacuum forming said pre-shaped sheet (15), making it adhere to the shaping surface of the mold (11).

2. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 1, wherein carrying out an

enrichment step of the plastic sheet material (15), causing the formation of a sag (15A) in a controlled way, during the heating step.

3. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 2, wherein forming, by gravity, a downwardly facing sag (15A), during the heating step.

4. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 2, wherein forming an upwardly facing sag (15A), pneumatically supporting the sheet of material during the heating step.

5. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 1, wherein pre-shaping the sheet material (15), after the enrichment step, by a shaping plug.

6. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 1, wherein holding the sheet material 15 along the peripheral edges by a variable geometry clamping frame (14) comprising articulated and/or longitudinally sliding frame portions (14A, 14B; 14C, 14D, 14E), and causing an enrichment of the sheet material (15) by a relative movement between the frame portions (14A, 14B; 14C, 14D, 14E) of the clamping frame (14).

7. (withdrawn) A method for the manufacture of thermoformed bodies according to claim 1, wherein carrying out the enrichment step of the heated sheet material (15), by a combination of sliding and/or rotational movements for approaching, raising and/or lowering the edges of the plastic sheet (15).

8. (currently amended) A mold and clamping frame assembly configured for the manufacture of a vacuum thermoformed body from a plastic sheet, comprising:

- a thermoforming mold having a sheet shaping surface, a peripheral edge and ~~an outer step backward from the peripheral edge~~ a stepped surface which extends from a base of the mold which would allow the clamping frame to mate with the mold;

- the clamping frame being a sheet clamping frame peripherally extending all around the mold;

- a support frame and a first control means conformed to move the clamping frame between a raised position above the mold and a lowered position on the outer step backward from the edge of the mold;

- in which the clamping frame comprises at least first and second frame members movable in relation to each other, and a second control means operatively connected to the frame members to selectively change their disposition and geometric configuration of the clamping frame, to pre-shape and conform the

plastic sheet to the shaping surface of the mold in the raised position of the clamping frame;

the clamping frame comprises two parallel extending top-open air-suction slots having a bottom wall, the suction slots being spaced apart by an intermediate baffle; and

each suction slot comprises a bar having a width smaller than and spaced apart from the bottom wall, to provide narrow air passages in communication with an air suction manifold by suction holes.

9-11. (canceled)

12. (previously presented) The assembly according to claim 8, wherein the clamping frame has a variable geometry for holding the plastic sheet, and comprises slidable and/or pivotally connected frame portions disposable on a same plane.

13-16. (canceled)

17. (new) A mold and clamping frame assembly configured for the manufacture of a vacuum thermoformed body from a plastic sheet, comprising:

- a thermoforming mold having a sheet shaping surface and a raised peripheral edge conformed against the plastic sheet

and a stepped surface which extends from a base of the mold which would allow the clamping frame to mate with the mold;

- the clamping frame being a sheet clamping frame peripherally extending all around the mold, said clamping frame being conformed and arranged to clamp the plastic sheet at a bottom side;

- in which the clamping frame comprises at least first and second frame members movable in relation to each other, and a first control means operatively connected to the frame members to selectively change their disposition and geometric configuration of the clamping frame, to pre-shape and conform the plastic sheet to the shaping surface of the mold in the raised position of the clamping frame;

- a support frame and a second control means conformed to move the clamping frame in a changed geometric configuration between a raised position above the mold and a lowered position on the outer step backward from the edge of the mold, to tightly urge the pre-shaped plastic sheet against said peripheral edge of the mold;

- the clamping frame comprises two parallel extending top-open air-suction slots having a bottom wall, the suction slots being spaced apart by an intermediate baffle; and

- each suction slot comprises a bar having a width smaller than and spaced apart from the bottom wall, to provide narrow air passages in communication with an air suction manifold

by suction holes, causing an air suction in the slot up-stream said narrow air passages to clamp the plastic sheet.

18. (new) The assembly according to claim 17, wherein the clamping frame has a variable geometry for holding the plastic sheet, and comprises slidably and/or pivotally connected frame portions disposable on a same plane.